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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,605	12/29/2003	Cheryl J. Brickey	86683PAL	6529

EXAMINER
BUI PHO, PASCAL M

ART UNIT	PAPER NUMBER
2878	

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Paul A. Leipold
Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/747,605

Applicant(s)

BRICKEY ET AL.

Examiner

Pascal M. Bui-Pho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 6, 10, 15, 18, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Chin et al. (US 6,653,619).

With regards to claim 1, Chin et al. disclose in Figs. 1 and 2 a timing device comprising an indicator device (1, 4, 6) and a detector (8) wherein said indicator device comprises the combination of a light-emissive element (1, 4) and a patterning layer (6) patterned with a timing device encoder pattern wherein said indicator device moves relative to said detector. Since element (1, 4) reflects light originating from light source (3), it is herein considered that element (1, 4) is light emissive, as claimed.

With regards to claim 6, Chin et al. disclose a timing device wherein the detector (8) is sensitive to the wavelength of light emitted by said light-emissive element.

With regards to claim 10, Chin et al. disclose a timing device wherein said detector (8) comprises more than one sensor (Column 4, lines 40-59).

With regards to claims 15, 18, and 19, Chin et al. disclose a timing device wherein said indicator element is an arcuate shape (generally depicted in Fig. 1), in a disk (generally depicted in Fig. 2), or in a strip (Column 4, lines 40-59).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-5, 7-9, 13, 14, 16, 17, and 20-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chin et al. (US 6,653,619).

With regards to claims 2, 3, and 7-9, Chin et al. disclose in Figs. 1 and 2 a timing device comprising a light-emissive element (1, 4), but lack a clear disclosure of said element being an electroluminescent material, an organic light-emitting diode, pulse emitter, pixels, and/or emitting light in multiple wavelengths. At the time of the invention, however, selecting a particular light-emissive element to provide different lighting characteristics would have been obvious to one of ordinary skill in the art. Therefore, at the time of the invention, it would have been obvious to modify Chin et al. by selecting an electroluminescent material, an organic light-emitting diode, pulse emitter, pixels as the light-emissive element, or emitting light in multiple wavelengths in order to provide a longer lasting life of the light source and gain greater control over the output of the device.

With regards to claims 4, 5, and 26, Chin et al. disclose a timing device comprising an indicator device (1, 4, 6) with inherent bending stiffness, radius, and density. One of ordinary

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skill in the art would recognize that such properties exist in all timing devices. Chin et al. however lack a clear disclosure of a desired bending stiffness, radius, or density. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955), the court held that “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation”. Hence, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Chin et al. by selecting an optical and/or desired bending stiffness, radius, and density, in order to provide optimal performance and detection.

With regards to claims 13 and 14, Chin et al. disclose a timing device, but lack a clear inclusion of a shield that only allows the detector (8) to receive light from a small portion of the indicator device (1, 4, 6) and the inclusion of light focusing or directing lenses. Selecting known available optical elements to modulate light would have been obvious to one of ordinary skill in the art. Accordingly, at the time of the invention, it would have been obvious to modify Chin et al. by including the claimed optical elements in order to provide greater control of the modulation of the light.

With regards to claims 16 and 17, Chin et al. disclose a timing device comprising an indicator device, but lack a clear disclosure of said indicator element being in a tubular shape with light emissive elements on the exterior of the tube. Selecting a desired shape and/or form for said indicator device would have been obvious to one of ordinary skill in the art. See *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). At the time of the invention, it would have been obvious to modify Chin et al. by selecting a tubular shaped indicator device in order to provide a more compact design.

With regards to claims 20-25 and 27, Chin et al. disclose a timing device comprising a patterning layer (6), but lack a clear specification/method of forming said layer. At the time of the invention, however, selecting a particular mean and/or method of forming a patterning layer would have been obvious to one of ordinary skill in the art. Accordingly, at the time of the invention, it would have been obvious to modify Chin et al. and select a desired method of forming a patterning layer in order to provide an optimal quality of the design of the system, if so desired.

With regards to claims 28 and 29, Chin et al. disclose a timing device comprising an indicator device with an inherent angle of view, but lack a clear disclosure of said device being between 5 and 15 degrees. Selecting an optimal range for said indicator device in order to provide optimal detection would have been obvious to one of ordinary skill in the art. Accordingly, it would have been obvious to modify Chin et al. by including an indicator device with an angle of view between 5 and 15 degrees in order to provide more reliable sensing results.

Response to Arguments

6. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: I) Kataoka (US 6,642,507)

Telephone/Fax Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pascal M. Bui-Pho whose telephone number is (571) 272-2714.

The examiner can normally be reached on Monday through Friday: 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pascal M. Bui-Pho
Examiner, Art Unit 2878
14 September 2007


QUE TAN LE
PRIMARY EXAMINER